

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0204202N: DDG-1000							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	0.000	524.269	549.241	0.000	549.241	337.564	124.079	177.579	171.945	Continuing	Continuing
2464: DD(X) Sys Design, Dev & Integration	0.000	412.663	441.117	0.000	441.117	269.960	112.857	155.876	149.793	Continuing	Continuing
4009: Advanced Gun System (AGS) on DD(X)	0.000	111.606	108.124	0.000	108.124	67.604	11.222	21.703	22.152	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:  
This Program Element (PE) provides funds for development of the DDG 1000 Class of U.S. Navy surface combatants. The mission of the DDG 1000 class is to provide affordable and credible independent forward presence/deterrence and operate as an integral part of Naval, Joint or Combined Maritime Forces. DDG 1000 will provide advanced land attack capability in support of the ground campaign and contribute to Naval, Joint or Combined battlespace dominance in littoral operations. DDG 1000 will establish and maintain surface and sub-surface superiority, provide local air defense, and incorporate signature reduction to operate in all threat environments. DDG 1000 will have seamless Joint Interoperability to integrate all source information for battlespace awareness and weapons direction. Funding for FY 10 and follow was realigned from PE 0604300N.

<b>B. Program Change Summary (\$ in Millions)</b>					
	<b><u>FY 2009</u></b>	<b><u>FY 2010</u></b>	<b><u>FY 2011 Base</u></b>	<b><u>FY 2011 OCO</u></b>	<b><u>FY 2011 Total</u></b>
Previous President's Budget	0.000	539.053	0.000	0.000	0.000
Current President's Budget	0.000	524.269	549.241	0.000	549.241
Total Adjustments	0.000	-14.784	549.241	0.000	549.241
• Congressional General Reductions		-2.184			
• Congressional Directed Reductions		-12.600			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Program Adjustments	0.000	0.000	549.241	0.000	549.241

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<p><b><u>Change Summary Explanation</u></b></p> <p>Technical: Not applicable.</p> <p>Schedule: Not applicable.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0204202N: <i>DDG-1000</i>				<b>PROJECT</b> 2464: <i>DD(X) Sys Design, Dev &amp; Integration</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
2464: <i>DD(X) Sys Design, Dev &amp; Integration</i>	0.000	412.663	441.117	0.000	441.117	269.960	112.857	155.876	149.793	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>A. Mission Description and Budget Item Justification</b> This project encompasses DDG 1000 development efforts required to deliver the Flight I DDG 1000 Class Ships. Major efforts include software requirements analysis, architectural and design code and unit testing, integration, qualification testing, and Independent Verification and Validation (IV&V) for software releases 5-6; hull form testing at Naval Surface Warfare Center/Carderock; communication and sensor aperture cosite and electromagnetic interference risk reductions testing for critical arrays; planning for Integrated Power Systems (IPS) and ship control system testing and integration; develop Tomahawk Weapon Control System software; Integration of Line of Sight (LOS)/Below Line of Site (BLOS) communication capability; and develop an alternative to Full Ship Shock Trials (FSSTs). Funding for previous years is included in PE 0604300N.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
							<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
System Engineering, Development and Testing							0.000	392.663	406.117	0.000	406.117
<i>FY 2010 Plans:</i> Development of the DDG 1000 Flight 1 software, Commercial Off the Shelf/Government Off the Shelf (COTS/GOTS) software acquisition, code and unit testing, integration, qualification testing, and Independent Verification and Validation (IV&V). Development of a total system software architecture that defines the relationships and interfaces among the software segments, elements, components and/or configuration items using an incremental release process (Software (SW) Releases 5-6). Conduct the following events for the remaining software releases: Software Release 5-complete Test Readiness Review (TRR), System Acceptance Testing (SAT) and Software Certification Panel (SCP) in FY10. Software Release 6 - conduct SW Preliminary Design Review (S-PDR) and SW Critical											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Design Review (S-CDR) in FY10. The following efforts will occur in FY10: Conduct all developmental software test planning, conduct, test data analysis and reporting in accordance with the DDG 1000 TEMP. Perform total ship system design analysis. Perform systems engineering, develop, and fully integrate into the DDG 1000 System an Electric Ship (ES) system for DDG 1000. Integrate Next Generation Command and Control Processor (NGC2P). For Next Generation Command and Control Processor (NGC2P) complete hardware and software through Software Release 6, accomplish testing and certification. Develop, test and integrate the Common Display System (CDS) consoles and medium/large screen displays.						
FY 2011 Base Plans: Software Release 6 will enter into the Design, Code, Test and Integration phase and begin Software Integration and Test (SWIT) activities. The following efforts will continue in FY11: Conduct all developmental software test planning, conduct, test data analysis and reporting in accordance with the DDG 1000 TEMP. Perform total ship system design analysis. Perform systems engineering, develop, and fully integrate into the DDG 1000 System an Electric Ship (ES) system for DDG 1000. Integrate Next Generation Command and Control Processor (NGC2P). For Next Generation Command and Control Processor (NGC2P) complete hardware and software development through Software Release 6, accomplish testing and certification. Develop, test and integrate the Common Display System (CDS) consoles and medium/large screen displays. Continue hull form testing at NSWC/Carderock. Planning for IPS and Ship Control System (SCS) testing and integration at Naval Surface Warfare Center/Philadelphia. Conduct communication and sensor aperture cosite and electromagnetic interference risk reduction testing for critical arrays at the Wallops Island Test Facility. Develop Tomahawk Weapons Control System software. Conduct developmental testing and operation evaluation in accordance with TEMP. Conduct Live Fire Testing & Vulnerability Analysis in accordance with TEMP. Conduct signature range Non-Recurring Engineering (NRE) to upgrade ranges to support DDG 1000 test and evaluation.						
Line of Site (LOS)/Below Line of Site (BLOS) Communication Capability		0.000	20.000	22.000	0.000	22.000

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B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: Provides funding for integration of High Frequency (HF), Very High Frequency (VHF) and Ultra High Frequency (UHF) Line of Site (LOS)/Below Line of Site (BLOS) communication capability on DDG 1000 and 1001.											
FY 2011 Base Plans: Provides funding for integration of High Frequency (HF), Very High Frequency (VHF) and Ultra High Frequency (UHF) Line of Site (LOS)/Below Line of Site (BLOS) communication capability on DDG 1000 and 1001.											
Alternative to Full Ship Shock Trials (FSST)  FY 2011 Base Plans: Provides funding to develop a common, affordable Navy-wide alternative to Full Ship Shock Trials (FSST) for Surface Ships, Aircraft Carriers and Submarines in support of OPNAV N091 Memo dated 5 November 2007 (DON Test & Evaluation Objectives). FSSTs are required for all new ship classes and flights to confirm design and construction shock-hardness requirements and as part of OSD's Live Fire Test & Evaluation survivability assessment.						0.000	0.000	13.000	0.000	13.000	
Accomplishments/Planned Programs Subtotals						0.000	412.663	441.117	0.000	441.117	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• SCN/ 2119: DDG 1000	1,504.297	1,378.532	186.312	0.000	186.312	139.388	133.168	126.325	50.871	0.000	3,518.893
	433.347	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	433.347

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<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• RDTEN/0604300N: <i>SC-21 Total Ship System Engineering</i>											
<b>D. Acquisition Strategy</b> A revised acquisition strategy is being reviewed by the Navy and OSD that supports the DDG-1000/DDG-51 restart shipyard allocation workload MOAs. Execution of the MOAs would shift primary construction of all three DDG-1000 class ships to Bath Iron Works (BIW).											
<b>E. Performance Metrics</b> Successfully achieve Milestone C. Successfully achieve Initial Operational Capability. Successfully complete Operation Test Readiness Review. Successfully complete Developmental Test/Operational Test.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				<b>R-1 ITEM NOMENCLATURE</b> PE 0204202N: DDG-1000				<b>PROJECT</b> 2464: DD(X) Sys Design, Dev & Integration						
<b>Product Development (\$ in Millions)</b>														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Ship Integration Development Phase IV	C/CPAF	Raytheon Tewksbury MA	0.000	308.418	Dec 2009	252.744	Dec 2010	0.000		252.744	Continuing	Continuing	Continuing	
<b>Subtotal</b>			0.000	308.418		252.744		0.000		252.744				
<b>Remarks</b>														
<b>Test and Evaluation (\$ in Millions)</b>														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Live Fire Test and Evaluation	C/CPAF	Raytheon Tewksbury MA	0.000	5.000	Dec 2009	7.900	Dec 2010	0.000		7.900	Continuing	Continuing	Continuing	
Test and Evaluation	Various/ Various	Various Various	0.000	37.255	Dec 2009	127.105	Dec 2010	0.000		127.105	Continuing	Continuing	Continuing	
<b>Subtotal</b>			0.000	42.255		135.005		0.000		135.005				
<b>Remarks</b>														

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0204202N: DDG-1000					PROJECT 2464: DD(X) Sys Design, Dev & Integration				
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Government Engineering Services	WR	NSWC Dahlgren VA	0.000	13.300	Dec 2009	13.500	Dec 2010	0.000		13.500	Continuing	Continuing	Continuing	
Government Engineering Services	WR	NSWC Philadelphia PA	0.000	7.000	Dec 2009	3.000	Dec 2010	0.000		3.000	Continuing	Continuing	Continuing	
Government Engineering Services	WR	NSWC Port Huneme CA	0.000	1.252	Dec 2009	1.252	Dec 2010	0.000		1.252	Continuing	Continuing	Continuing	
Government Engineering Services	WR	NSWC Patuxent River MD	0.000	8.408	Dec 2009	8.408	Dec 2010	0.000		8.408	Continuing	Continuing	Continuing	
Government Engineering Services	WR	NSWC Bethesda MD	0.000	15.100	Dec 2009	15.400	Dec 2010	0.000		15.400	Continuing	Continuing	Continuing	
Government Engineering Services	WR	SSCSD San Diego CA	0.000	8.240	Dec 2009	2.828	Dec 2010	0.000		2.828	Continuing	Continuing	Continuing	
Government Engineering Services	Various/ Various	Other Govt Activities Various	0.000	7.690	Dec 2009	7.980	Dec 2010	0.000		7.980	Continuing	Continuing	Continuing	
Travel	Various/ Various	Various Various	0.000	1.000	Dec 2009	1.000	Dec 2010	0.000		1.000	Continuing	Continuing	Continuing	
Subtotal			0.000	61.990		53.368		0.000		53.368				
Remarks														

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2011 Navy							<b>DATE:</b> February 2010				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0204202N: <i>DDG-1000</i>			<b>PROJECT</b> 2464: <i>DD(X) Sys Design, Dev &amp; Integration</i>				
	<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	0.000	412.663		441.117		0.000		441.117			
<b>Remarks</b>											

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

DATE: February 2010

## APPROPRIATION/BUDGET ACTIVITY

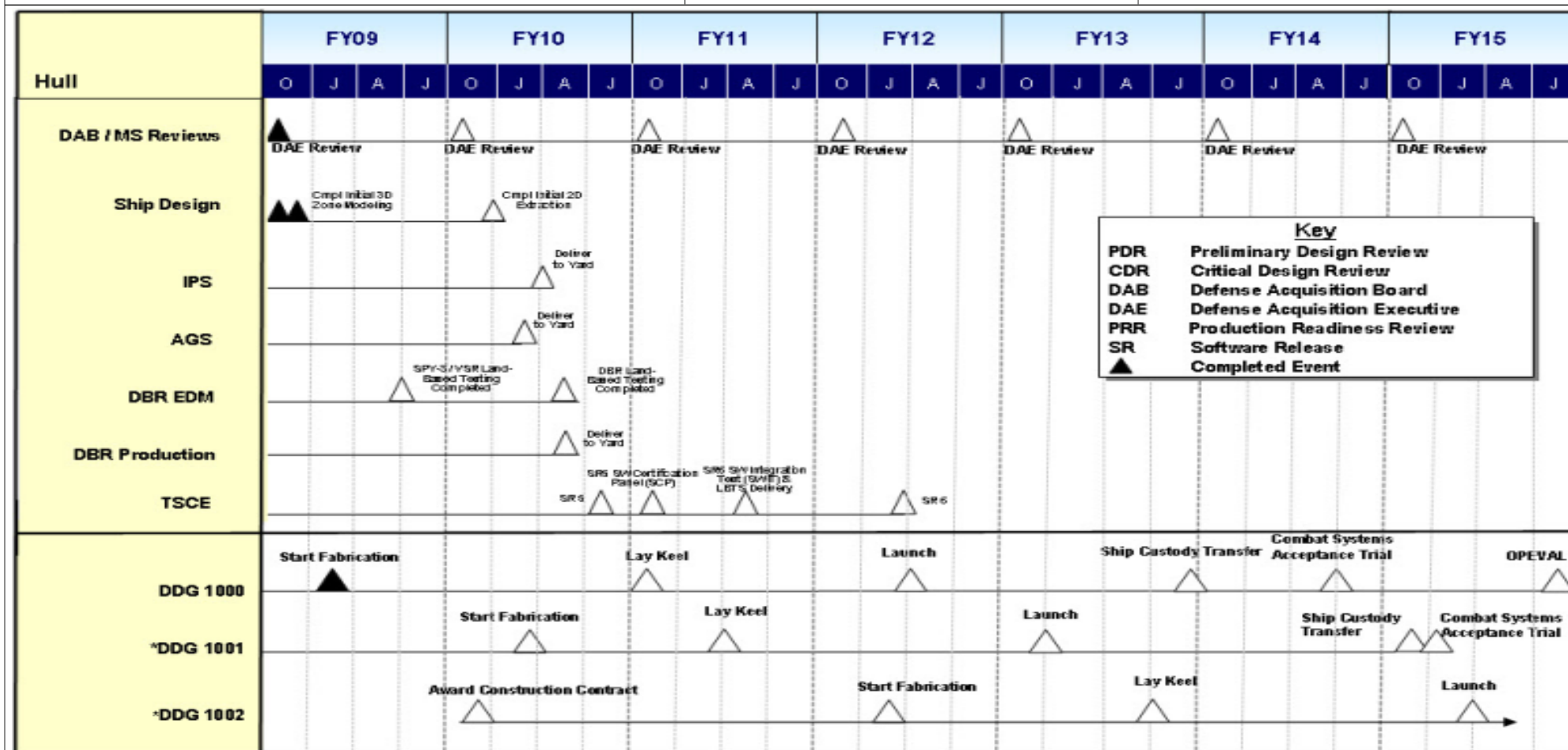
1319: Research, Development, Test & Evaluation, Navy  
BA 5: Development & Demonstration (SDD)

## R-1 ITEM NOMENCLATURE

PE 0204202N: DDG-1000

## PROJECT

2464: DD(X) Sys Design, Dev & Integration



\*DDG 1001 / 1002 Schedule will be re-evaluated as part of the transition to BIW

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0204202N: <i>DDG-1000</i>	PROJECT 2464: <i>DD(X) Sys Design, Dev &amp; Integration</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Software Release SR5	4	2010	4	2010
Software Release SR6	2	2012	2	2012

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0204202N: <i>DDG-1000</i>				<b>PROJECT</b> 4009: <i>Advanced Gun System (AGS) on DD(X)</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
4009: <i>Advanced Gun System (AGS) on DD(X)</i>	0.000	111.606	108.124	0.000	108.124	67.604	11.222	21.703	22.152	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>A. Mission Description and Budget Item Justification</b> These funds provide for the development of the Advanced Gun System (AGS) and the development, qualification and initial production of the Long Range Land Attack Projectile (LRLAP) associated with the development of DDG 1000. The AGS will consist of a major caliber gun, an automated ammunition handling system, and a family of munitions/propelling charges. The AGS will, at a minimum, meet the Land Attack and Surface Dominance Missions assigned to the gun system. The system will provide a high rate of fire (approximately 10 rounds per minute) with a magazine capacity sufficient in size for meeting USMC operational requirements. LRLAP will be stored throughout its life cycle in an 8 round pallet which is handled by the AGS magazine. By palletizing the munition, AGS is able to significantly reduce manning and improve munition reliability, safety and resupply. The LRLAP Engineering Development Model (EDM) guided flight tests began in Dec 2004. System Design and Development began in FY06 with final land based qualification testing planned in FY12. The Long Range Land Attack Projectile (LRLAP) will deliver a high explosive unitary payload with Global Positioning System (GPS) accuracy. Funding for previous years is included in PE 0604300N.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
Development of Hardware Test Assets <i>FY 2010 Plans:</i> Procurement of AGS Qualification test assets.						0.000	1.100	0.000	0.000	0.000	
System Engineering, Development and Testing <i>FY 2010 Plans:</i> LRLAP System Design, development and qualification testing.						0.000	45.173	81.194	0.000	81.194	

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>					
<i>FY 2011 Base Plans:</i> LRLAP System Design, development and qualification testing.											
Procurement of Ordnance Test Assets  <i>FY 2010 Plans:</i> Procurement of LRLAP rounds for qualification testing.  <i>FY 2011 Base Plans:</i> Procurement of LRLAP rounds for qualification testing.		0.000	65.333	26.930	0.000	26.930					
Accomplishments/Planned Programs Subtotals		0.000	111.606	108.124	0.000	108.124					
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• SCN/2119: <i>DDG 1000</i>	1,504.297	1,378.532	186.312	0.000	186.312	139.388	133.168	126.325	50.871	0.000	3,518.893
• RDTEN/0604300N: <i>SC-21 Total Ship System Engineering</i>	433.347	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	433.347
<b>D. Acquisition Strategy</b>											
A revised acquisition strategy is being reviewed by the Navy and OSD that supports the DDG-1000/DDG-51 restart shipyard allocation workload MOAs. Execution of the MOAs would shift all three DDG-1000 class ships to Bath Iron Works (BIW). AGS is developed via a sole source contract to BAE. Lockheed is the key supplier to BAE for LRLAP development.											
<b>E. Performance Metrics</b>											
Successfully achieve Milestone C. Successfully achieve Initial Operational Capability. Successfully complete Operation Test Readiness Review. Successfully complete Developmental Test/Operational Test.											

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**Product Development (\$ in Millions)**

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPAF	BAE Minneapolis MN	0.000	106.704	Dec 2009	99.450	Dec 2010	0.000		99.450	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	106.704		99.450		0.000		99.450			

**Remarks**

**Test and Evaluation (\$ in Millions)**

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	Various/ Various	Various Not Specified	0.000	2.200	Dec 2009	6.358	Dec 2010	0.000		6.358	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	2.200		6.358		0.000		6.358			

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<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Contractor Engineering Services	Various/ Various	Various Not Specified	0.000	0.452	Dec 2009	0.400	Dec 2010	0.000		0.400	Continuing	Continuing	Continuing
Government Engineering Services	WR	NSWC DD Dahlgren VA	0.000	1.635	Dec 2009	1.416	Dec 2010	0.000		1.416	Continuing	Continuing	Continuing
Government Engineering Services	WR	NSWC PHD Pt Hueneme CA	0.000	0.190	Dec 2009	0.400	Dec 2010	0.000		0.400	Continuing	Continuing	Continuing
Government Engineering Services	WR	Various Not Specified	0.000	0.425	Dec 2009	0.100	Dec 2010	0.000		0.100	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	2.702		2.316		0.000		2.316			
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			0.000	111.606		108.124		0.000		108.124			
<b>Remarks</b>													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

DATE: February 2010

## APPROPRIATION/BUDGET ACTIVITY

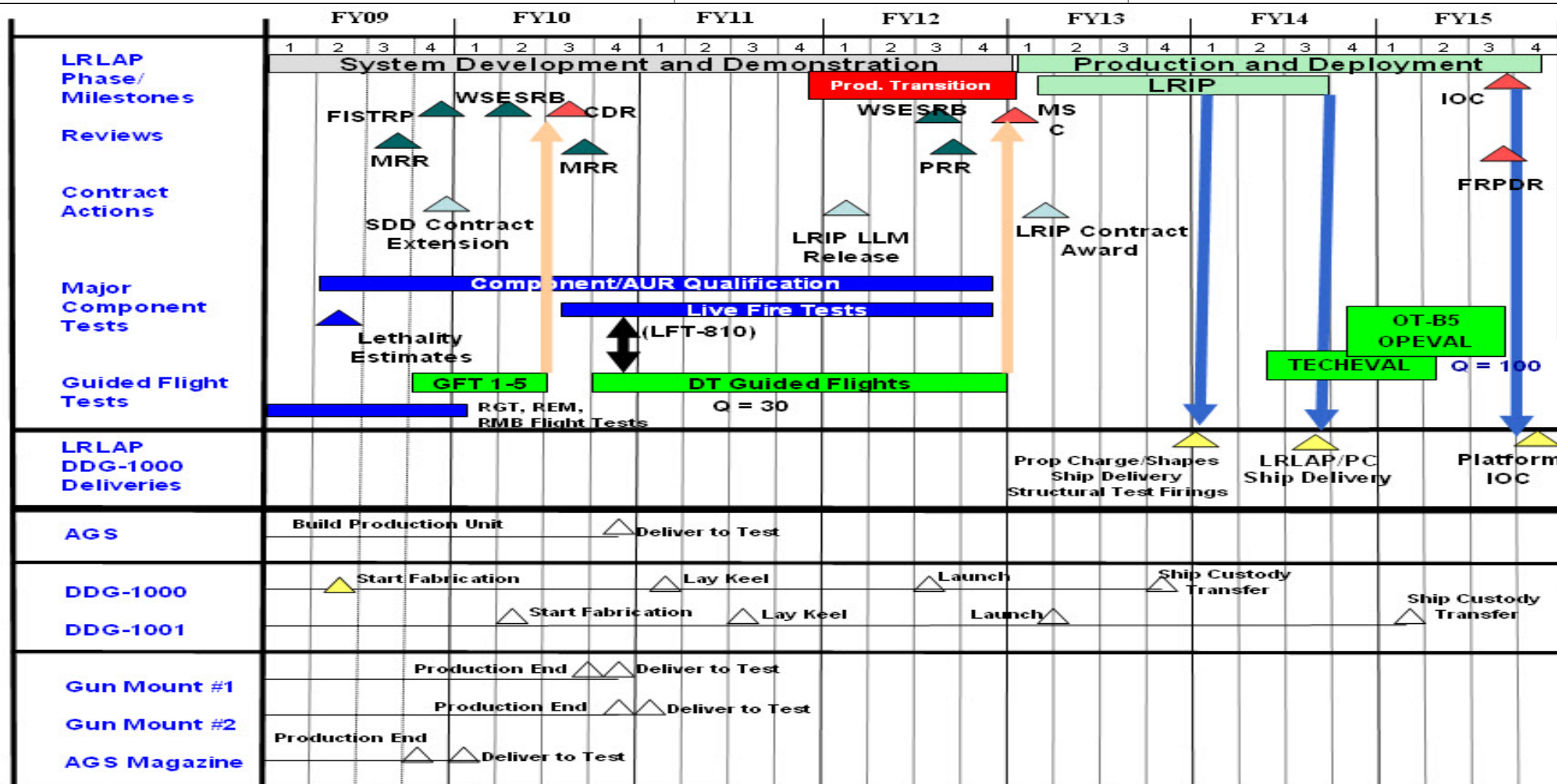
1319: Research, Development, Test & Evaluation, Navy  
BA 5: Development & Demonstration (SDD)

## R-1 ITEM NOMENCLATURE

PE 0204202N: DDG-1000

## PROJECT

4009: Advanced Gun System (AGS) on DD(X)



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Navy			<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0204202N: <i>DDG-1000</i>	<b>PROJECT</b> 4009: <i>Advanced Gun System (AGS) on DD(X)</i>	

## Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Guided Flight Tests	4	2009	4	2012
Qualification	2	2009	4	2012
Critical Design Review (CDR)	3	2010	3	2010
Milestone C (MS C)	1	2013	1	2013
Wpn Sys Explosive Safety Revw Bd (WSESRB)	2	2010	3	2012
Low Rate Initial Production (LRIP)	1	2013	3	2014
Initial Operating Capability (IOC)	3	2015	3	2015
Live Fire Tests	3	2010	4	2012
Full Rate Production Decision Review (FRP DR)	3	2015	3	2015
AGS Build Production Unit	1	2009	4	2010
AGS Deliver to Test	4	2010	4	2010
Gun Mount #1 Production End	3	2010	4	2010
Gun Mount #1 Deliver to Test	4	2010	4	2010
Gun Mount #2 Production End	4	2010	4	2010
Gun Mount #2 Deliver to Test	1	2011	1	2011
AGS Magazine Production End	4	2009	4	2009
AGS Magazine Deliver to Test	1	2010	1	2010

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